UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: FEB 2.7 1981

SUBJECT: Washington Trip, February 23-24, 1981

- Kenneth A. Fenner, Chief

Enforcement Branch

TO: Sandra S. Gardebring
Director, Enforcement Division



As you know I spent Monday, February 23, conferring with DOJ, The U.S. Attorney and Headquarter's Task Force staff on the Reilly Tar case and Tuesday, February 24 as part of the Headquarter working group on RCRA 3013 and 7003 orders. I will summarize salient events in each.

1. Reilly Tar. Tony Roisman chaired the meeting that I perceived to be primarily designed to assist Tom Berg and Frank Hermann in charting case strategy. Other participants included Lamar Miller, Frank Biros and Fred Stiehl (HQ), Frank Hermann (AWA), Erika Dolgin (DOJ), Melanie, Bob and myself. Tom had expressd his concern to me last Friday that there appeared to be differences between all participants on the conduct of the case, but more importantly, that he needed assistance in responding to Reilly's settlement representations. These questions involved both the cleanup options available, impact of Superfund and Reilly's capabilities. As a starting point to the first item, Melanie's paper summarizing the FIT report was used as the basis for discussion (See Attachment A), and it was agreed that the several components of cleanup would be further identified, defined and that negotiations with Reilly should be focused on each discrete element probably in a series of negotiating sessions. These discrete elements of cleanup will be embodied in the 3rd draft of the Consent Decree that is now being reviewed by all parties (See Attachment B, second draft resulting from Regional and DOJ review of initial draft). Frank Biros will coordinate HO review with a April 15, 1981 date for a complete draft Consent Decree.

On the question of CERCL ("circle," or \$F) coordination, Tony has evidently established good contacts with Mike Cook aimed at "lashing down the cannons" in HQ at the same time I am doing that through my weekly meetings at the Regional level. Cook has agreed that "demands" for cleanup under CERCL in cases where there is ongoing litigation should come from the U.S. Attorney handling the case. I agreed that this avoids bifurcated contacts that can confuse case negotiations and is consistent with Regional policy that looks to the local U.S. Attorney lead in most instances (HQ had expressed an interest in having HQ Office of Enforcement issue these demands, which I believe will be hopelessly confusing). We also discussed the status of CERCL funding and LaMar Miller candidly admitted funds would not be available until mid FY 82 optimistically (The office toutes another view). Tony had

2 had also received a firm commitment from Cook to notify in advance and clear with DOJ any CERCL related press releases. (I support these efforts to control HQ CERCL elements that presently appear to be acting solely on their own.) Finally we clarified that the approximately \$2,800,000 allocated to CERCL sites is for engineering studies only and that Berg will ask that Reilly do the work at the St. Louis site. A large part of the five hour meeting also dealt with the background of CERCL and 311, "what is coal tar," Reilly's threatened motion to dismiss and amendment of complaint to include a CERCL count, etc. Berg appeared to be pleased with the outcome of the meeting and Tony and I got along well. 3013 and 7003 orders. Attendees included myself, Kirk Sniff (Region VI Legal Branch Chief), Lloyd Guerci (DOJ) and Rich Smith, Doug Farnsworth, Richard Mays, Gary Hess, Jim Dragna and Joel Mintz (from HQ, they were clearly outnumbered). Basic questions were: a. what is a 7003 Order, b. what is a 3013 order. c. what national issues require HQ concurrence for either, d. status of delegation. Doug Farnsworth had produced two draft HQ guidance memos that I indicated need certain revisions, notably to avoid categorizing when and when not to use these orders (Guerci agreed) and to focus on how to go about the formulation of an order. The discussions on what are 7003 and 3013 orders centered on the Regions view that 7003 orders are largely remedy oriented much like consent decrees or judgments and represent an end product of case development, whereas 3013 orders would be initiated early in the case development process and serve us means for arriving at a remedy analagous to CWA 308 or RCRA 3007 orders. As such, we agreed that a more structured review of 7003 orders would be appropriate, whereas, 3013 orders should not require HQ concurrence (the HQ contingent indicated they would make this recommendation to MacMillan). On the concurrence question, they took the position that we saw this as a useful investigatory tool and my esitmate was that our sweeps showed that about 10% of the sites required followup that might be answerable to 3013 orders. The regions also objected to the draft guidance that attempted to limit use of 7003/3013 to situa-. tions involving minor environmental impacts. As I see 3013, it is mainly useful against large companies capable of funding extentive contamination studies. 7003 too is certainly useful against any size entity and has some negotiating advantages over litigation. Guerci and I also spent a good deal of time discussing the formulation of the orders. (I used copies of our 3008 orders as a sample showing the kinds of findings we think are necessary to support an order). 006373 On the status of delegation, I have attached a copy of the draft package being prepared for the new Administrator. Rich Smith will recommend to MacMillan deletion of HQ concurrences for 3013 orders (you will see a memo for your signature to Jeff Miller saying the same with this report).

### 3. Other items.

a. FY 82 Planning. Don Olsen is sending a package to the Regions asking for comments based upon the FY 81 Water Enforcement workload analysis and model. I am presently putting together comments.

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b. Office of Hazardous Waste Enforcement (OHWE). This reorganization is now effective with MacMillan as Acting Deputy Assistant Administrator, OHWE and Lamar Miller as Acting Director, Technical Division. Supposedly, Water Enforcement is transferring all its RCRA related materials to this Office but I perceive many communication problems. LaMar indicated there is no RCRA enforcement model yet, and I am sending the workload analysis we have done.

Otherwise, a fun time was had by all.

Attachment

cc: Bryson
Toepfer
Leininger
Kyte
Frumm
Niedergang
Baumgartner
Swanson

DATE: FEB 2 0 1381

SUBJECT. Reilly Tar and Chemical Corporation, St. Louis Park, Minnesota Potential Settlement Strategy

FROM: Melanie Toepferus Engineering Section

To: Kenneth A. Fenner, Chief Water & Hazardous Materials Enforcement Branch

As you know, Reilly has made an offer to EPA through Tom Berg for settlement of the civil lawsuit. Reilly's offer consists of \$1,000,000 (monetary relief, not services) in exchange for a release from liability. We do not believe such an offer to be adequate for the reasons outlined below:

- 1. Julie Paržen, EPA-HQ-Office of Enforcement, has completed an economic assessment of the Reilly Tar and Chemical Corporation based on a 1978 Dun and Bradstreet report. Reilly is a closely held corporation and therefore, the economic analysis necessitated that certain assumptions be made. Parzen's assessment concluded that Reilly can afford to pay a maximum of \$5,000,000/year; probably not a one-time huge cash outlay. This assessment assumed a 39% profit margin for chemical industrial facilities. Reilly's actual profit figures are not publicly available and therefore, there may be some error in this assessment.
- 2. Ecology and Environment, Inc. (FIT), has prepared a cost-estimate report for me based on several categories of relief outlined in the first draft of an EPA-Reilly consent decree. These categories are:
  - A. Treatment of the St. Louis Park water supply
  - B. Multiaquifer wells, including W-23 and W-105 (on-site)
  - C. Soil contamination
  - D. Barrier wells (Gradient control wells )
  - E. Well Field Management (Monitoring)

The total clean-up is estimated to cost between \$167,000,000 and \$272,000,000. (Many propertients were made to generate such cost information; alternative remedial methods may be investigated in the future.)

These clean-up costs may be summarized as follows:

A. Treatment of the St. Louis Park water supply.

Note--On February 18, 1981, Hopkins municipal well No. 3 was closed down due to PAH contamination. This well is the first municipal supply well to be contaminated and closed. Well No. 3 is located to the southwest of the Reilly site, less than 1.25 miles. It is a Prairie du Chien-Jordan well.

- i. Carbon adsorption with regeneration capital costs \$1,761,000 operation and maintenance (O&M) costs/year \$231,000
- ii. Carbon adsorption without regeneration--powdered activated carbon (PAC) capital costs \$913,000 0&i4 costs/year \$265,000 (disposal costs were not included)
- iii. Modification of an existing facility (e.g., W-15)
  capital costs \$720,000
  0&id costs/year \$90,000

Assuming option A.i.: capital costs = \$1,761,000 0&M costs/year = \$231,000

B. Multiaquifer wells, including W-23 (on-site Hinckley well) and W-105 (Sugar Beet well)

A multiaquifer well is one that allows leakage of contaminated water from one aquifer to another through the well casing. These leaks may be caused by inadequate construction of the well or cracks in the well casing. It has been hypothesized that multiaquifer wells have significantly contributed to the vertical flow of pollutants between the geologic formations underlying St. Louis Park. Such wells must be identified and sealed to prevent further pollutant movement. Two such wells, W-23 and W-105, have been identified on the former Reilly site. This remedial activity would be conducted in cooperation with the Minnesota Department of Health's Well Abandonment Program and would cost approximately \$450,000.

#### C. Soil Contamination

These cost estimates are based on the Barr Engineering isopleths of soil contamination using phenol concentrations as the parameter of interest. This is the best summary of areal soil contamination information available at the present time. However, isopleths of phenolic concentrations are not sufficient and more polynuclear aromatic hydrocarbon (PAH) concentration isopleths need to be developed in the future.

The following prices assume: excavation of contaminated soils; disposal of these soils in a hazardous waste landfill; transportation costs to ship the contaminated soils to the Chicago Waste Management facility because there are no hazardous waste disposal sites in Minnesota presently; backfill; and dewatering expenses. Further, these costs assume 750 yd<sup>3</sup>/day removal and 260 days/work-year. (See the attached table for cost information.)

### D. Barrier wells (Gradient control wells)

These cost estimates assume installation of 3 barrier wells and 9 monitoring wells in each aquifer.

Construction and in a lation costs

Drift Platteville St. Peter Prairie du Chien- Hinckley	Jordan	•	39,225 53,490 104,130 403,560 ,103,460
•	TOTAL	\$1	,704,000

The capital costs for the treatment of gradient control well water is estimated to be \$4,930,000.

Total capital costs = \$6.634,000

0&M costs/year (assumes \$1,200,000 user charge to the City treatment plant) = \$2,170,000

### E. Well Management (Monitoring)

A significant amount of chemical analyses will be necessary throughout the life of the remedial programs to be undertaken relative to the Reilly site. It has been estimated that chemical analyses will cost between \$7,000,000 and \$16,000,000 (\$320,000/year) over the next 50 years. The price differential is caused by the difference in the number of organic compounds analyzed for each sample.

# SOIL CONTAMINATION - COST ESTIMATES

DEPTH OF EXCAVATION	AMOUNT OF SOIL REMOVED	% CONTAMINATION REMOVED (phenol)	YEARS TO COMPLETE	COST	COST/YEAR
10 ft.	1.15 M yd <sup>3</sup>	45%	6	\$104,000,000	17.5 M
20 ft.	1.85 M $yd^3$	75%	10	\$155,000,000	15.5 M
30 ft.	2.25 M yd <sup>3</sup>	90%	12	\$193,000,000	16.1 M

### Proposed Strategy

I would like to propose the following settlement and remedial strategy to you. EPA should negotiate with Reilly for remedial activities A, B, D and E above. Capital costs for these projects total approximately \$9,100,000. Because of the large amount of construction required, this project might take two years to complete and thus be something that Reilly can afford. (I think that Reilly should be given the opportunity to actively pursue alternative remedial methods, so long as these alternatives fulfill the requirements above-described.) OSH costs/year for these activities--A, B, D and E--total approximately \$2,750,000.

I believe the cost of soil excavation to be prohibitive. It seems more reasonable to pursue vaulting or fixation of the "hot spots," than excavation of the entire contaminated zone. I do recommend that soil contamination remedial activities be pursued by the Office of Superfund. It might be possible to negotiate a consent decree for items A, B, D and E with Reilly, and develop a Memorandum of Understanding with Reilly, filed with the court, for EPA soil contamination cleanup through Superfund.

The long term costs might be absorbed by Reilly through establishment of a trust, for example, (under supervision of the court) for future monitoring and O&M costs. The philosophy of such a trust would be consistent with the post-closure requirements of RCRA.

James 7. 1981

Attachment B

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UNITED STATES DISTRICT COURT DISTRICT OF MINNESOTA FOURTH DIVISION

Mad some

United States of America, Plaintiff,

and

State of Minnesota, Minnesota Department of Health, and Minnesota Pollution Control Agency, Plaintiff-Intervenor,

٧.

Reilly Tar and Chemical Corporation; Housing and Redevelopment Authority of St. Louis Park; Oak Park Village Associates; Rustic Oaks Condominium, Inc.; and Phillip's Investment Company, Defendants.

and

City of St. Louis Park, Plaintiff-Intervenor.

٧.

Reilly Tar and Chemical Corporation, Defendant. Civil Action No. 4-80-469

### CONSENT DECREE

The above captioned Complaint having been filed on September 4, 1980, by Thomas K. Berg, the United States Attorney for the District of Minnesota, on behalf of the Administrator of the United States Environmental Protection Agency (hereafter "EPA") and the Motions to Intervene of the State of Minnesota and the City of St. Louis Park having been granted on October 15, 1980, and all of the parties to this civil action, by their respective attorneys having consented to the entry of this Consent Decree,



NOW, THEREFORE, before the taking of any testimony, upon the pleadings, and without admission or adjudication of any issue of fact or law herein, and upon consent of the parties hereto, it is ORDERED, ADJUDGED and DECREED as follows:

I

This Court has jurisdiction of the subject matter of the case pursuant to 28 U.S.C. 1345 and 42 U.S.C. 6973 and has jurisdiction of the parties herein.

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This decree shall apply to and be binding upon the parties, their officials, officers, directors, agents, servants, employees, successors and assignees and upon all persons, firms, subsidiaries and corporations acting under, through or for, or in active concert or participation with the parties.

III

All reports, notices, plans, documents or other information that must be summitted in satisfaction af any requirement of this Consent Decree shall be submitted:

As to Reilly Tar and Chemical Corporation:

As to EPA:

3 copies to Director of Enforcement Division, Region V

As to the State of Minnesota:

All plans, programs, reports and proposed actions required to be submitted hereunder shall be prepared by Reilly and Chemical Corporation (hereinafter "Reilly") or by consultants which may be hired by Reilly.

Refly shall be solely responsible for submitting all such materials directly to EPA and the State of Minnesota (hereinafter "Minnesota").

All materials submitted by Reilly pursuant to this Consent Decree are subject to the approval of EPA and Minnesota. Reilly must fully comply with any request for background data or for clarification of any submittal within seven days of such request by EPA or Minnesota.

No advice, guidance, suggestions or comments by EPA or Minnesota on materials submitted by Reilly shall be construed so as to relieve Reilly of its responsibilities under this Consent Decree or transfer any of Reilly's liability or obligation in this action to Plaintiffs.

IV

# Maintenance of Drinking Water Supply

Upon entry of this decree, Reilly shall submit to EPA and Minnesota an engineering plan for the treatment of the St. Louis Park and surrounding municipalities' water supplies. The engineering plan shall include a monitoring plan to analytically determine the concentration of polynuclear aromatic hydrocarbons (PAHs) in the water supply wells presently used or to be used for human consumption within St. Louis Park, Minnetonka, Hopkins, Edina, Richfield, Plymouth, and Golden Valley. The engineering plan shall address water treatment with carbon adsorption technology, or equivalent, of all wells identified in the above described monitoring program as having total PAH concentrations greater than 2.8 ng/l (ppt). The water from each such identified well shall be treated to 2.8 ng/l of total PAH compounds.

Within 180 days after approval of the engineering plan by EPA and Minnesota, Reilly shall complete the monitoring of all human consumption water supply wells in the above designated municipalities.

Within 90 days after completion of such monitoring program, Reilly shall

complete installation of the approved treatment systems at locations as designated by EPA and Minnessota for treatment of the drinking water supply.

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# Disclosure of All Waste Disposal Practices, Sites and Material Disposed

Upon entry of this Decree, Reilly shall submit a report to EPA and Minnesota describing all past waste disposal practices, and the locations of all past waste disposal known to it at the former Reilly facility in St. Louis Park, Minnesota. Said report shall be developed from all available information, whether contained in company records or otherwise known to Reilly or its employees. Said report shall be supplemented or revised as further information becomes available.

VI

### Immediate Remedies

### A. On-site Hinckley Well (W-23)

Within 30 days of the date of entry of this Decree, Reilly shall submit to EPA and Minnesota, an engineering plan for drilling, renovation, and/or sealing of the Hinckley well (905 feet deep), also known as W-23, on the former Reilly site. The engineering plan shall include a discussion of the drilling protocol and protocols for sampling and analysis of the Prairie du Chien-Jordan and Hinckley aquifers, specifying location and number of samples to be taken, and the permanent disposition of W-23.

# B. Other Multiaquifer Wells

Reilly shall identify and sample for PAH and phenolic compounds all multiaquifer wells found to be leaking between aquifers. Reilly shall coordinate this effort with the Well Abandonment Program of the Minnesota Department of Health.

Reilly shall case and seal or renovate all identified multiaquifer wells found to be leaking and contributing to the Prairie du Chien-Jordan

VII

### Soil Contamination

Within 120 days of the date of this Decree, Reilly shall identify and map areas of soil contamination on and off the former Reilly site. Such mapping shall identify heavily contaminated areas ("hot spots") as compared to background concentrations of specific organic chemicals, including at least PAHs and phenolic compounds. Background concentrations shall be determined from composite soil borings taken from off-site areas of soil type similar to the former Reilly site. Within this time period, Reilly shall submit these maps with the supporting analytic data in a report to EPA and Minnesota.

Reilly shall prepare an engineering plan for isolation and containment or removal and diposal of soils contaminated above background concentrations. Such engineering plan shall be submitted to EPA and Minnesota for approval within 60 days of completion of the identification and mapping of soil contamination as requireed in the preceeding paragraph.

Within 180 days of approval of the engineering plan by EPA and Minnesota, Reilly shall complete the implementation of the approved soil contamination clean-up engineering plan.

#### IIIV

## Aquifer Contamination

Within 120 days of the date of entry of this Decree, Reilly shall identify and map geographic areas of aquifer contamination in St. Louis Park and the surrounding municipalities listed in Paragraph A above. Contaminated areas shall be mapped after comparison to the water quality of outlying municipalities.

analytic data in a report to EPA and Minnesota.

Reilly shall prepare an engineering plan for treatment and restoration of the contaminated aquifers to 2.8 ng/l total PAH. Such engineering plan shall be submitted to EPA and Minnesota within 60 days of completion of the identification and mapping of coal tar contaminants within the five aquifers, as required in the preceeding paragraph.

Within 240 days of approval of the engineering plan by EPA and Minnesota, Reilly shall complete the implementation of the approved aquifer clean-up engineering plan.

IX

# Effectiveness of Remedial Activity

Reilly shall design and implement, subject to the approval of EPA and Minnesota, a 50 year monitoring program to assess the effectiveness of remedial activities in St. Louis Park and the surrounding municipalities. The monitoring program shall include provisions for well field management to contain the contaminant plume, and sampling and analysis of soil and water quality to ensure the effectiveness of the above described remedial programs.

The monitoring plan shall be submitted to EPA and Minnesota for approval within 365 days of the date of entry of this Decree. The program shall be implemented within 60 days of its approval by EPA and Minnesota.

X

Any dispute which arises with respect to the meaning, application or interpretation of this Consent Decree or with respect to any of the Reilly submissions, may be referred to the Court for appropriate resolution if it cannot be resolved by the parties. In resolving such a dispute, the meaning, application or interpretation presented by the Plaintiffs

shall control unless the Court is convinced that Plaintiffs' position is arbitrary and capricious.

XΙ

Reilly shall notify EPA and Minnesota in writing within twenty

(20) days of any event which causes or may cause a delay in the achievement of compliance with any requirement of this Decree. Such notice shall describe in detail the anticipated length of the delay, the precise cause or causes of the delay, the measures taken or to be taken by Reilly to prevent or minimize the delay and the timetable by which those measures will be implemented. Reilly shall adopt all reasonable measures to avoid or minimize any such delay.

The parties may stipulate to an extension of the particular compliance requirement affected, by a period not exceeding the delay actually caused by such circumstances. On such event, the parties may apply to this Court for an appropriate modification of this Decree. In the event that the parties cannot agree, any party may submit the matter to this Court for resolution. Reilly shall have the burden of proving that any delay was caused by circumstances entirely beyond its control in order to be granted an extension of a compliance date. An extension of one compliance date based upon a particular incident does not mean that Reilly qualifies for an extension of a subsequent compliance date or dates. Reilly must make an individual showing of proof regarding each incremental step or other requirement for which an extension is sought.

### XII

If Reilly fails to meet any of the schedules as set forth in this
Consent Decree or as they may be revised pursuant to Paragraph XI above,
Reilly, in addition to any sanctions imposed or relief granted by the
Court shall tender the following amounts to the Director of Enforcement

Division, EPA, Region V, by certified check made payable to the U.S. Treasury:

# Days After Required Date

# <u>Penalties</u>

1-30

3-60

61 or more

\$5000 per day of noncompliance \$7000 per day of noncompliance \$10,000 per day of noncompliance

Reilly shall submit written progress reports by the tenth day of every month following entry of this Consent Decree to EPA and Minnesota which describe the actions which have been taken toward achieving compliance with the Consent Decree as well as the activities which are scheduled for the next month.

#### XIV

All data, information, remedial plans and other documents produced by Reilly in the course of implementing the Consent Decree shall be available to the public, unless identified as confidential by Reilly in conformance with, in the case of EPA, 40 CFR Part 2 and, in the case of Minnesota, applicable Minnesota law. Documents or information so identified shall be treated as confidential only in accordance with the applicable confidentiality regulations.

### XV

All remedial measures undertaken pursuant to this Consent Decree shall be performed in compliance with all applicable Federal and .

State laws and regulations.

# IVX

Until all work is completed and accepted by the Plaintiffs, Minnesota and EPA or their designated representatives shall have authority to enter all property which is the subject matter of this Decree at any

which EPA has incurred for past monitoring and investigations at the Reilly Tar site and areas affected thereby.

#### IIIVX

Implementation and completion of all measures which are required by the terms of this Consent Decree, shall be in full satisfaction of all alleged violations of law set forth in the Complaint.

# XIX

This Court specifically retains jurisdiction over both the subject matter hereof and of the parties hereto for the purposes of enforcing or modifying the terms of this Consent Decree or for granting any other relief which the Court deems just and appropriate, until December 31,

2080 or thereafter if granted pursuant to motion of either party hereto or upon Motion of the Court.

XX

The parties hereto hereby consent to the entry of this Consent Decree without further notice or hearing.